A NEW COLOMBIAN SPECIES OF LECYTHIDACEAE

By

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Gustavia romeroi Mori & H. García-Barriga, sp. nov. Fig. 1 A, B, C, D.

Arbor ad 18 m alta, truncus 40 cm diametro, rami vero 3-5 cm diametro sursum arcuati; folia laxe aggregata ad ramulorum apicem. *Cortex* brunneus, leviter fissuratus. *Laminae* coriaceae, ellipticae, apice breviter acuminatae, integrae, basi acutae, 17.5-21.0 cm longae, 6-7 cm latae, glabrae, venis lateralibus utroque latere 12-14; petioli 1.5-3.5 cm longi, 1-2 mm crassi, subteretes. *Inflorescentiae* caulinares, racemosae, contractae, 4-5 florae; rachis 0.7-1.5 cm longa; pedicelli 2.5-4.5 cm longi, ad basim bractea caduca aucti, insuper et bracteis aliis 2 ovatis persistentibus, 2-4 mm longis et 4-5 mm latis infra hypanthium orientibus. *Flores* plene explicati 8-12 cm diametro; hypanthium ecostatum, albo tomento praeditum atque rubellis brunneis lenticellis, 4- loculatum; lobi calycis 4, rotundati plus minusve cucullati, 2-4 mm longi, 7-10 mm lati, viride-flavi; petala (11) 12 (18), oblongo-oblanceolata, 3.5-7.0 cm longa, 2.0-2.5 cm lata, puberula, alba, ad apicem leviter rosea; androphorum 1.5-3.0 cm diametro, basi connata 0.7-1.4 cm alta; filamenta externa 1.2-2.0 cm longa, ad basim flava versus apicem rosea; antherae 2.0-2.5 mm longae, flavae; ovarii vertice albo-tomentoso; stylus 1-2 mm longus, stigma 4-lobatum. *Fructus* ignotus.

Medium sized tree up to 18 m tall and 40 cm DBH; the leaf bearing branches 3-5 mm in diameter, arching upwards. *Bark* brown, lightly fissured. *Leaf blades* elliptic, the apices acuminate, the margins entire, the bases acute, 17.5-21.0 cm long, 6-7 cm wide, glabrous, with 12-14 lateral veins, coriaceous; the petioles 1.5-3.5 cm long, 1-2 mm thick, subterete.

Inflorescences cauline, contracted racemose, 4-5 florae; rachis 0.7-1.5 cm long; pedicels 2.5-4.5 cm long with a single caducous bract at the base and two ovate, persistent bracteoles 2-4 mm long, 4-5 mm wide inserted below the hypanthium. *Flowers* 8-12 cm in diameter when expanded; hypanthium without wings and with a white tomentum of simple usually 2-5 celled living hairs and with reddish brown lenticels, 4-loculate; 4 calyx lobes, more or less cucullate, 2-4 mm long, 7-10 mm wide, greenish yellow; petals (11) 12 (18), oblong-oblanceolate, 3.5-7.0 cm long, 2.0-2.5 cm wide, puberulous, white, slightly pink at the apex; androphore 1.5-3.0 cm in diameter, the connate base 0.7-1.4 cm high, outermost filaments 1.2-2.0 cm long, yellow at the base, rose at the apex; anthers 2.0-2.5 mm long, yellow; summit of the ovary white tomentose; style 1-2 mm long; stigma 4-lobed. *Fruit* unknown.

TYPUS: Colombia, Santander, Campo Capote (6º 38' N, 73° 55' W) and vicinity, Compartment 82, alt. 100-200 m, 9 jul. 1971, *Nee and Mori 4303*, fl. **(Holotype:** COL; **Isotypes:** BM, COL, F, MO, NY, US, VEN, WIS).

Distribution. Apparently confined to the Magdalena Valley of Colombia.

Additional material examined. COLOMBIA. Santander. Vicinity of Barrancabermeja, Magdalena Valley, between Sogamoso and Carare Rivers, alt. 100-500 m, 28 oct. 1936, *Haught 2042*, fl. (NY, US); Magdalena Valley, Cimitarra, 1 sep. 1954, *Lamb 186*, fl. (US); 10 leguas al SE de Barrancabermeja, a 8 kms de la margen izquierda del Río Opón, alt. más o menos 200 m, 26 ago. 1954, *Romero-Castañeda 4708*, fl. (COL. US), 3 sept. 1954, *Romero-Castañeda 4819*, fl. (COL, US); 12 leguas al SE de Barrancabermeja, a 5 kms de la margen derecha del Río Opón, alt. 200 m, 29 sept. 1954, *Romero-Castañeda 4960*, fl. (COL, US).

Local names. Coco hediondo *(Lamb 186)*, Mula muerta *(Romero-Castañeda 4708, 4960)*.

Ecology. A medium sized forest tree usually at elevations around 200 or less meters but possibly found at up to 500 meters. The 6 flowering collections have been made between July and October with 3 of these collected in September. Fruits of the species are not yet known.

Comments. This species differs from all other *Gustavia* species by having 12 or 16 petals. The usual petal number in the genus is 6 or 8. The cauline inflorescences, upward curving pedicels (Fig. 1-B), and the reddish brown lenticels on the hypanthium and pedicels are also diagnostic.

A short time after being cut the wood emits a fetid odor. This smell is alluded to in the common names (Coco hediondo = evil smelling coco, Mula muerta = dead mule).

Vegetatively the closest relative to this species is *Gustavia speciosa* which, however, has 6 (-8) petals and both terminal and cauline inflorescences. The sympatric *G. santanderiensis* is a small tree up to 5 m with generally 8 petals and terminal inflorescences. *Gustavia nana*, possibly also sympatric, is easily separated from *G. romeroi* by its smaller stature, 8 petals, and straight pedicels. Other *Gustavia* species in the region are not easily confused with this taxon because of their much larger leaves *(G. spruceana, G. superba)* or because they have winged hypanthia *(G. longifuniculata, G. pleurocarpa)*.

We are proud to dedicate this species to the memory of Rafael Romero-Castañeda whose contributions to Colombia botany will long be remembered. Professor Romero-Castañeda was a researcher at the Instituto de Ciencias Naturales from 1958 until the day of his death (Jan. 10, 1973). He leaves several important publications as well as over 11.000 plant collections from Colombia.

FIG. 1. Vegetative, inflorescence, and floral characteristics of *G. romeroi*. A. Leaves grouped at the ends of an upward arching branch. B. Cauline inflorescences with upward arching, lenticellate pedicels. C. Flower closeup showing the inflexed stamens and 12 petals (there are sometimes 18 petals). D. Entire flower and a separate androphore. (A. photographed by Scott Mori; B. C. D by Mike Nee; all of the type, *Nee and Mori 4303*).